Hendrick Hudson School District

Strategic Instructional Technology Plan

Revised October, 2015

who achieves his or her maximum potential and contributes to society.

This is accomplished by a system characterized by: a culture of highest expectations for all, an exemplary staff, diverse instructive strategies that meet the individual interests and abilities of all students, optimal technology embedded in teaching and learning and a fully engaged, supportive community dedicated to common goals.

Technology Leadership Team Membership
September 2015

- Caroline Almeida — Assistant Director of PPS
- Carol Abraham — BOE Trustee
- Charles Thompson — BOE Trustee
- Christine Cunane — Elementary Teacher
- Laurie Baisley — Elementary Teacher
- Nupur Pal — Elementary Teacher
- Todd Leonardo — Elementary Teacher
- Marcia Bailey — Math Teacher
- Penny Hine — Reading Teacher
- Maura Koch — Business/Computer Teacher
- Nina Levine — Library Media Specialist
- Sherri Lutwyche — Library Media Specialist
- Susan McCormack — Library Media Specialist
- Barbara Pettersen — BOE Trustee
- Elisa Rosen — Elementary Teacher
- Colleen Ruiz — Educational Technology Teacher
- Sally Simon — Enrichment Teacher
- Mathew Swerdloff — Executive Director of Educational Support Services

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Technology is present in every aspect of our culture. Therefore, our educators will integrate technology within the learning and teaching experience to mirror the way technology is utilized in society, to maximize student potential, to prepare students to contribute to society, and to help students develop 21st century competencies

Educators will:

- Provide a means of communication within the school, across the district, in the wider community, in the global community
- Create an interactive, information-rich learning environment that will support research and problem-solving skills while enhancing opportunities for creativity.
- Support learning strategies that foster responsible behaviors.
- Promote ethical and socially responsible use of hardware and software.
- Allow for diversity in learning styles through opportunities for students to be in self-directed, teacher-directed, independent, and/or cooperative work.
- Ensure technology is as indispensable a tool in the learning environment as the pencil and the book.
- Empower teachers and students to use technology to extend, enhance and enrich the learning experience in order to prepare students to be full participants in a technological society.

The Hendrick Hudson School District believes in the effective integration of instructional technology within the teaching and learning process. Information technology is pervasive in our culture and the district continues to adopt appropriate elements in support of its core mission of educating children.

The Hendrick Hudson School District's Technology Leadership Team has developed a seventh Technology Plan that builds upon the previous technology plans and promotes technology use throughout the Hendrick Hudson School District community in an effective, efficient fashion to enhance learning. The plan builds upon the district's mission to use technology to enrich learning in our classrooms, and to prepare Hendrick Hudson students for post-secondary education and the workplace. Specific recommendations provide for:

- Equitable access to district technology;

- Ongoing staff development;

- A framework to ensure technology is reliable, compatible with software and hardware, and consistently used;

- Community participation and opportunities to benefit from new technology communication structures;

- Fiscally responsible purchases that support the integration of technology into the education plans and goals for the district;

- A sound, well-funded system for the efficient maintenance, replacement and replenishment of equipment and supplies.

The Technology Plan is designed to serve as a living document. As such, annual reviews and modifications in the Technology Plan are important if it is to be implemented effectively. One way of assuring this is to evaluate technology related staffing continually to make the most effective and strategic use of these resources.

SECTION 3	STRATEGIC RECOMMENDATIONS 2015-2016

The District will assess its infrastructure on an ongoing basis, and will deploy technology resources strategically to meet building instructional and administrative goals.

Critical Success Factors for Deployment – Technology Infrastructure

- Each building team will work with the Executive Director to plan and deploy computer hardware.

- Continuous evaluation of computing devices will be made. The district will investigate the feasabilty of movbing towards a 1:1 and\or BYOD environment, as well as the expansion fo the Mobile Learning Initiative.

- Each building team shall develop and implement a plan for meeting the District's Instructional Technology Objectives.

- Each building team will provide input into the process for deployment of hardware and software to meet administrative needs.

- The District will follow proportional and equitable allocation of technology based on program and enrollment needs throughout the buildings. It is the responsibility of the district to ensure equity of access for all students.

- The District will continuously evaluate its relationship with service providers, and choose those providers that offer the services that will best meet the long term needs of the district.

- The District will continue its commitment to a computer replacement plan based on the projections outlined in this document. However, specific devices may change based on need.

- The District will investigate the feasibility of expanding the existing mobile Chromebook carts in each school for student and staff use. Such mobile carts will comply with security requirements outlined in the latest independent audit.

The District will provide a continuum of staff development, training and on-site support, organized by local and state learning standards, differentiated and targeted to individual competency levels. The Instructional Technology Coaches are integral to this effort.

Critical Success Factors for Professional Development

- District wide expectations for the use of technology, including level of minimal competency, will be reinforced. This will include, but not be limited to, the use of email by staff, teacher websites, and implementation of K-12 technology objectives by staff. These expectations will be developed collaboratively with district staff and administration.

- Technical competency and professional development will be assessed using the International Society for Technology in Education standards for technology as a guideline.

- The District will continue to provide cost effective, in-house, and multi-modal offerings for training.

- The District will investigate online learning opportunities for staff.

- The District will investigate the creation of a Technology Integration Specialist at each school. This individual would work collaboratively with staff in their classrooms in the use and integration of technology tools. This would expand the current Instructional Technology Coach model to an individual without student teaching responsibilities.

- The District will investigate ways to further enable the collaboration between library media specialists and staff in the integration of information literacy skills into student work.

- The District will continue and expand the Instructional Technology Academy for staff to include summer offerings, online classes and weekend institutes.

- Students will utilize technology in learning and practicing the purposeful and effective information literacy skills as defined by ISTE and AASL, with the integral support, collaboration, and consultation of the district's library media specialists.

- The District will support and expand as appropriate the Instructional Technology Coach model.

The District commits to using technology for the purpose of enhancing and expanding the curriculum, to provide students with multiple opportunities for learning and collaboration, and for creating a rich environment where all students are engaged in the learning process.

<div align="center">Critical Success Factors for Curriculum and Instruction</div>

- The infusion of Technology Objectives into the curriculum mapping process will be critical to the success of this initiative, and the District will make an ongoing commitment to implement these objectives, with input from all stakeholders. In addition,
    - Students will engage technology by: researching and gathering information, using critical thinking, analyzing and integrating information from various sources, and demonstrating information literacy skills throughout the K-12 curriculum.
    - Students will create finished products that utilize foundational and advanced technology skills, including keyboarding, word processing, graphing, desktop publishing, and using peripherals.
- Every effort will be made to support the use of instructional technology in support of academic goals. However, there are times when technology use and skills stand on their own as independent instructional objectives. This includes, but is not limited to, effective touch typing, use of online collaborative tools, database access skills, research protocols, and the responsible management of one's online identity.

The District will develop a fiscally responsible and creative plan for supporting technology initiatives in the district.

Critical Success Factors for Budget and Finance

- The District will pursue alternative funding solutions, including grants, government programs, and private sector contributions. However, these sources will be considered as supplemental and will not be relied upon for funding the ongoing technology program.
- The District will continue a process of incremental increases to the budget each year in order to reach a level that can sustain the current technology initiatives and allow for growth.
- The District will continue its plan to strategically address the issue of hardware obsolescence.
- There will be a logical and thoughtful process for replacing old hardware, and for deploying new hardware within the district. This is a process to be developed by the Executive Director in consultation with the Technology Leadership Team.
- The issue of mobile devices as compared to fixed computers will be thoroughly explored.
- The District will review site licensing for software (network, site, single) and determine arrangements most suited to district needs.
- The District will continue an annual purchase of computers using a leasing model to support the computer replacement plan.
- The District will continuously evaluate ongoing relationships with our primary technical support vendors, Edutek, Ltd., and CSI, Inc.

The District will continue to utilize its human infrastructure, and will consider redesigned roles and responsibilities as required. The District will expand its human infrastructure when possible.

Critical Success Factors for Human Infrastructure

- The District will continually evaluate the need for technical support throughout buildings.
- The District will strive to hire a full-time Database Specialist to provide oversight for the various information systems in the district, instructional and administrative, as well as manage data analysis and state reporting requirements. This will be essential to the effective use of Infinite Campus.
- The Technology Leadership Team will meet regularly under the direction of the Executive Director.
- Remote support and management options will be explored as a way of increasing efficiency and response speed for technical issues.

The District will work with the entire community to assist and support the integration of technology into the Hendrick Hudson School District and to maximize the benefits of technology for the entire community.

Critical Success Factors for Enhancing Community Involvement

- The District will encourage enhanced collaboration and communication to parents and the community through web-based tools.
- The district will inform community members of policies, best practices, curriculum initiatives, etc. using the district's website, as well as traditional print means.

The District will commit to a measured, gradual increase in technology funds in each of the coming five years. It is the goal of the Technology Leadership Team to work within fiscal guidelines as it proceeds with the development of this plan. Funds include monies provided from the annual budget, leasing arrangements, grants, or E-Rate funding.

The Hendrick Hudson District Technology Leadership Team recommends that the purchase of hardware and software be provided in an equitable manner. Equity is based on providing access to all staff and students, recognizing that all needs are valid and worthwhile. Every effort will be made to provide current technology that exceeds the needs of the educational program. The District recognizes that access to technology is no longer an option, and that in order to prepare our students for the world they will enter, we must provide access to the latest technology tools. In addition, the District recognizes that professional staff likewise needs access to tools in order to fulfill professional obligations.

PROPOSED SPENDING PLAN FOR TECHNOLOGY

A. Hardware

- The Hendrick Hudson School District's budget for 2015-2016 included $300,000 for computer hardware leasing. Alternative funding will be explored for additional hardware.
- Workstations will be purchased on an annual basis to follow the computer Replacement Plan.
- The District will utilize Smart Schools Bond funds to upgrade existing administrative technology systems, including access security, video, and phone systems.

B. Software

- Each year the District will continue to budget at least the New York State reimbursement allocation for computer software. The 2015-2016 budget has $57,000 allocated for computer software. The District, recognizing the necessity of providing rich content and appropriate software tools to students, will gradually increase this budget each year to

reach a target level of $10,000 per secondary building and $8,000 per elementary building.

- E-Rate refunds will be allocated toward software as well as hardware budgets.

C. Support Services

- The District will evaluate support services each year and adjust the financial commitment as needed.
- The support service budget will continue to fund four full-time technicians.

- The District will continue the option of contracting with additional vendors to deliver needed services in a timely, reliable and cost effective manner.

D. Staff Development

- The curriculum development budget will allocate 10% of its staff development budget toward technology training. The district will increase this budget incrementally for each year of the plan.
- The district will investigate the option of placing a "Technology Integration Specialist" in each building in order to support staff use of technology in an efficient manner.
- The commitment to professional development, given its strategic importance to the district, will continue.
- Staff Development, including ITA and ITC, will be funded for the 2015-2016 year at the rate of $32,000.

SECTION 5   EVALUATION AND ASSESSMENT OF TECHNOLOGY PLAN

A vital component to a living plan is an annual process to evaluate the effectiveness of the plan in reaching the objectives, and to communicate the current status to all stakeholders in the school community. Technology implementation is a continuous process that should adapt to the organization's changing circumstances and educational requirements. Effective evaluation will force planners to rethink and adapt objectives, priorities and strategies and the implementation processes. The following structures will support the evaluation process.

- The Hendrick Hudson School District supports sharing of responsibility for the evaluation and assessment of this plan.
- The Hendrick Hudson School District will monitor and evaluate the use of technology within instruction and staff development. It will address skill proficiency, attitudes towards technology, and the impact of technology on both student achievement and the workplace.
- Input will be sought from students, staff, and community in a variety of formats, including:
    - Pre and post surveys, online surveys:
            Regularly scheduled surveys will be administered to measure the extent to which the plan has met its objectives and expected outcomes.
    - Studies of classroom instructional outcomes to determine best practices:
            Informal interviews and focus groups will be held with students and teachers to draw out what was learned from the experience of using technology in the classroom, and how best to use technology.
    - Process oriented evaluations:
            In order for the District Technology Leadership Team and building teams to be active in the ongoing assessment and evaluation of technology and its impact, a plan will be developed to determine levels of technological proficiency among stakeholders. This study will primarily focus on attitudes toward technology and will track technology literacy of students, teachers and staff.

SECTION 6   TECHNOLOGY LEADERSHIP TEAM RECOMMENDATIONS

The consultants that worked with the Technology Leadership Team did an extensive assessment of the district. In the 2004 school year a Director of Technology was hired. What follows is a combination of the recommendations of the consultant, the Technology Leadership Team, and the current Executive Director.

Recommendation: When multiple operating systems (OS) are supported in a district, the knowledge base required is greater, and troubleshooting becomes more challenging. Most technical issues are related either to hardware or OS issues; as such, limiting the number of operating system versions in the district is highly recommended. The district should continue its commitment to a single platform of Windows on all workstations. Exceptions to this recommendation need to be carefully discussed and planned as they will have an exponential impact on support costs. The district is currently supporting two versions of Windows. This should be remedied with the implementation of a single version as soon as feasible.

Recommendation: The support costs for technology rise dramatically when it is left in service beyond its normal expected life. Most districts invest in older technology equipment because a systematic replacement cycle has not been adopted. An adopted cycle (5 years), either through equipment leasing or purchase and replace is essential. Without such a plan, there can be no forward movement in the District. The District will continue to support a five year replacement plan, replacing all hardware in one building each year.

Recommendation: In many organizations, up to 25% of the supported technology devices may be peripherals. Even with strong computer standards, peripheral standards are required to minimize the support challenges. This is especially true of peripherals that are accessed on the network. It is recommended that the peripheral standards that were put into place continue to be supported and reviewed annually. This is becoming more important as document cameras, projectors and whiteboards become increasingly commonplace. District staff needs to be made aware of this reality.

Recommendation: Most private industries staff technical support with a technician for every 75 computers. School districts will commonly see ratios of 250:1 or greater. It is recommended that technology staffing be prioritized to ensure minimal downtime.

Recommendation: Many common technical issues that arise are often simple in nature. An easy With the right information and a culture that promotes basic troubleshooting, users can, in most cases, help themselves resolve many technical problems. to use and searchable knowledgebase is critical to empower users to solve simple problems themselves. The more effective knowledge base implementations are those that grow with the organization and are populated by staff that is solving problems. To more effectively use staff time and resources, the use of an online knowledgebase is recommended.

Recommendation: Empowering the school employee to use technology effectively is a very effective strategy to address technical and support issues. It is recommended that an effective training program for ALL staff be continued, including very basic troubleshooting skills. This program should include appropriate incentives, accountability, and a diverse set of learning resources.

Approved October 2006

The Board of Education is responsible for the selection and designation of all software to be used in the District schools where the acquisition involves deployment in multiple schools, requires a significant* financial outlay, or requires funding over multiple years.   The Superintendent of Schools shall recommend to the Board suitable software to be used in the schools in these instances. This policy is intended to address only major acquisitions of software and only instructional titles.

The Superintendent shall be responsible for establishing procedures pertaining to the evaluation and recommendation of software to the Board. The criteria and guidelines which follow are to be considered in the selection of software:
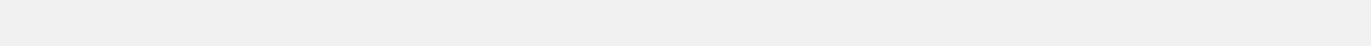
1. software should have received a favorable review in a professional journal;

2. the software should be adaptable to the existing instructional program;

3. the software should provide sufficient scope to meet the requirements of the curriculum developed locally, specifically the K-12 Instructional Technology Objectives, as well as with standards based on the New York State Education Department Standards;

4. the software should reflect objectivity and impartiality in the treatment of subject matter and freedom from bias and prejudice.

These criteria are not definitive and the Superintendent may consider other factors as deemed necessary.

Cross-ref: 1420, Complaints about Curricula or Instructional Materials
Ref: Education Law §§701 et seq. 1711; 2508; 2566

*   significant financial outlay is defined as a product that would consume at least 50% of the building / department software technology budget.

Revised by the Board of Education on January 27, 2005

The Hendrick Hudson School District is committed to the goal of having computers and network facilities used in a responsible, efficient, ethical and legal manner. The use of the District's network is to promote the exchange of information, to further education and research, and is consistent with the mission of the school district.

Acceptable use of computers and telecommunications includes activities that support teaching and learning. The use of District computers by students is limited to assignments or research for school related activities.   The use of District computers by staff is limited to school related business. The District will provide an Internet content filtering system appropriately designed for each grade level.

The District has the right to specify who uses its equipment and the information contained therein, under what circumstances, and to what purpose.

Staff will be informed of the rules and protocols for technology use on an annual basis via a district newsletter or other communication.   On an annual basis, parents, guardians and students will also be informed of the rules and policies regarding technology use, regardless of the age of the student. Only authorized users may access the system.

The use of the computer network is a privilege, not a right and unacceptable use of the network will result in limitation or cancellation of those privileges.   Unacceptable uses of the network include but are not limited to:

- Disrupting or destroying the work of others
- Plagiarism
- Vandalism
- Using profanity, obscenity or language which may be offensive to other users

- Copying from or installing software to district computers without authorization
- Using the network for personal profit, commercial or illegal activity
- Modifying system hardware or software settings without authorization
- Developing or spreading a computer virus

The District assumes no responsibility or liability if documents stored on District equipment are lost or damaged, nor will be the District be responsible for security violations.

The District bears no responsibility for the accuracy or quality of information obtained through its network. All users are responsible for considering the source of any information they obtain and how valid that information may be.

The District shall rigorously uphold laws pertaining to the use of technological equipment and the information contained on them and/or generated by its use. The District also shall rigorously uphold laws pertaining to the use of software.

The District may make available to staff tools for posting content online. All content posted shall be related to the instructional program. Staff may not post confidential student information, student biographical information, names associated with photos of individuals, or full names of students without explicit parental permission.   The District reserves the right to remove any online content that it deems inappropriate or unprofessional. In such cases the District will make an effort to provide adequate notice to the staff person, but cannot guarantee this.

Only equipment owned by the District may be attached to District networks. Staff may use their own equipment in the classroom, but may not attach it to the network. The District is not responsible for the maintenance, repair or software installation on any staff equipment. The District is not responsible for lost, damaged or stolen personal equipment.

The Superintendent is authorized to develop procedures and regulations to implement this policy.

These regulations were revised in the Spring of 2006 and were included in the District Code of Conduct in September of 2006.

General Principles

The faculty of Hendrick Hudson School District considers computers to be a valuable tool for education and encourages the use of computer related technology in school classrooms to further the educational goals of the District.

The use of software applications, networks and online resources will significantly enhance educational experiences and provide statewide, national and global communications opportunities for students.

When a student in the Hendrick Hudson School District accesses computers, networks, and educational technology owned or operated by the District, he or she assumes certain responsibilities and obligations. All access of this type is subject to school policies and to local, state, and federal laws. The Hendrick Hudson School District expects that student use of computers provided by this school will be lawful, for educational pursuits and will reflect academic honesty. Students must demonstrate respect for intellectual property, system security and privacy of others.

Obligations

As a student, you are expected to make appropriate use of computer resources provided by the district. You must:

- use computer resources only for educational purposes following established procedures;
- be responsible for all activities on your assigned account;

- report all potential security problems to a school administrator;
- access only files and data which are your own, which are publicly available, or to which you have been given access;
- use only legal versions of copyrighted software which have been purchased by the District;
- use email account (where provided) for school purposes only
- maintain the privacy of your own password.

Inappropriate Use

Students must not make inappropriate use of computer resources provided by the District. The following actions are inappropriate:

- plagiarizing digital resources and illegal use of copyrighted material
- using computers for personal entertainment and game playing;
- using computers for any personal communication (including email and chat) unrelated to school work;
- using another person's password or revealing your password to another student;
- using networks to store personal documents, images or files unrelated to school work;
- impersonating another user or acting in an anonymous fashion;
- using racist, sexist or derogatory language when using electronic means of communication;
- using another person's files or data without permission;
- using computer programs to decode passwords or to access control information;
- attempting to circumvent or subvert system security measures;
- copying files, data or programs from the Internet without permission;
- engaging in any activity that might be harmful to systems or to any information stored thereon, such as creating viruses, damaging files or disrupting service;
- vandalizing or modifying in any way hardware or software components;
- making or using copies of any software, storing such copies on school systems or sending them over networks;

- engaging in any activity that does not comply with the general principles listed at the beginning of this document.

Internet Use

Internet access is provided with the understanding that the District cannot control the content available on the Internet. The District will make a good faith effort to block objectionable sites using appropriate filtering software. However, some sites may contain information that is inaccurate, offensive, defamatory or otherwise inappropriate for students. Parents and students should be aware that it is the ultimate responsibility of the student to monitor his/her own access and use sound judgment.

Materials on the Internet that are of educational value may be copied for research purposes only. Students must cite all sources. Copyrighted materials may be used for educational purposes only. Students should assume that unless otherwise indicated, any material found on the Internet is copyrighted. Students must respect all copyright issues regarding software, information and attributions of authorship. Students should exercise care not to take ideas or writings from other individuals and offer them as their own. Students must give appropriate attribution to the author or creator of the idea.

Student work produced as part of school activities may be posted on the Hendrick Hudson School District website. In this case, the digital rendition of the student work will become the property of the school district, and may be modified to make technical corrections or fix grammatical errors, prior to posting on the Internet. Only student first names will be used when student work is posted, and individual student photographs will not be posted. Student names will not be associated with photographs.

Access to educational web logs (blogs) may be provided by district staff. In all cases where such access is granted, the use of blogs shall be consistent with the General Principles listed above. Blog content may be moderated by district staff, and staff reserves the right to removes postings that do not adhere to the principles above.

Email accounts may be provided for school related purposes. These accounts are to be used for communication with teachers, staff and students only.

In all cases access to the Internet is to be for educational purposes only. Any use that does not comply with these guidelines is an infringement on the legitimate use by others, and is a violation of this policy. Personal e-mail, chat, game playing, and viewing music videos are examples of uses that are not acceptable.

Sanctions

The Hendrick Hudson School District considers any violation of appropriate use principles or obligations to be a serious offense. The District reserves the right to monitor, copy, examine and delete any files or information on the network that may suggest that a student is using school computer systems inappropriately. Students should have no expectation of privacy when using electronic means of communication or information storage. Violators are subject to disciplinary action by school officials that may include in-or out-of-school suspension and/or limited use or suspension of computer access privileges. Where the use of the computer is an integral part of the student's educational program, students whose privileges are limited will need to use computers under supervision

The Administration may at any time suspend or revoke the computer use privileges for any actions in violation of the Guidelines above. Computer use privileges may be suspended prior to and during a formal investigation and decision regarding suspected violations of this policy.

1. Online Content

    a. All requests from staff for modification of school web pages must be approved by the appropriate building administrator prior to implementation.

    b. All requests from staff for modification of district web pages must be approved by the appropriate central office administrator prior to implementation.

    c. Staff must use good judgment in posting online content that is free of grammatical errors, accurate, and designed to meet the needs of students and parents. All links should be to sites that are reliable, factually correct, and pertinent to the educational mission of the district

    d. Staff will submit sites for posting to their building principal. The building principal will review sites using the criteria mentioned in (c) above. Sites may be periodically reviewed by the building administrator and may be taken offline if deemed to no longer meet the criteria in (c) above.

    e. Staff may create and post class or department pages on the district site only by using the tool provided by the district. As time, staffing and facilities permit, staff may be granted access to district web servers for additional content hosting, with prior administrative approval. Staff may not post student last names, photos with first or last names, personally identifying information of students, or any confidential student information, without prior parental authorization. Photos of students may be posted with student names to honor or acknowledge student work or achievement.

    f. Staff should validate the integrity of all external links on a regular basis.

    g. All posting of student created web content is to be clearly labeled as such and will be posted under the domain www.henhudkids.org.

    h. Staff may not post copyrighted content or code on district pages, including but not limited to text, audio, video, images and HTML, except where explicit written permission has been granted by the copyright holder. Staff may link to any site deemed educationally appropriate by the staff member.

    i. Staff weblogs (blogs) may be created under the district domain using the district authoring tool. Blogs that allow student posting must be moderated by the staff

member responsible for the blog. No unmoderated student posts are to be allowed.

2. Email Use
   a. In order to increase system stability and security, use of personal email accounts from within the district is prohibited.
   b. The district will provide an email to account to all instructional staff. As with other communication systems deployed by the district, such accounts are to be used primarily for professional purposes.
   c. It is expected that email correspondence from parents and community members will be responded to within a reasonable time period. However, a response to an email communication via email is not necessarily the most appropriate method. It is further expected that staff will choose the most appropriate form for their response, i.e. email, phone call or in person meeting.
   d. Email communication is not to be considered confidential; such communication is part of the public record. Administration may monitor email communication. In addition, all email messages remain the property of the district. and may be archived and accessed in compliance with state and federal regulations.

3. Use of Shared Resources
   a. The district will make every effort to provide ample storage resources for digital content. However, users should exercise discretion in saving data to shared network locations, and regular removal of unused files is required.

4. Use of Personal Electronic Equipment
   a. Staff may use personal electronic equipment at their own risk. The district is not responsible for maintenance, damage, repairs or theft to personal equipment.
   b. No personal electronic equipment may be connected to district networks.

5. Hardware Selection
   a. All hardware purchases at the building level shall be approved by the Director of Technology in collaboration with the building administrator. All purchases must comply with the Hardware Standards outlined in the Strategic Instructional Technology Plan.

6. Software
   a. Software selections are to be made at the building level whenever possible. The purchases of individual titles are to be minimized. Whenever possible, staff should order software titles by grade level, department, or building. This will enable

support staff to more effectively install and manage software applications. All software must be tested and approved by the Technology Department prior to deployment.

b. Staff may not make copies of district owned software, or install privately owned software on school computers.

c. Staff wishing to use their own software in school may donate their copy to the district, providing it is not installed on their home computer. Such requests must be approved by the Director of Technology in advance.

7. System Modifications

a. All modifications to system settings are to be made by technical support staff or with approval from this staff.

RATIONALE:

The need for uniform technology objectives K-12 is clear upon a careful examination of the issue. The area of computer technology is not formally addressed in any explicit state standards. It is addressed peripherally in the MST standards, but that is also in the context of the use of the term "technology" to refer to technological systems, not computers per se. The district currently offers a variety of opportunities to students in grades K-12 to use computer technology. However, there is no consistency between schools and even between teachers at a grade level, there is little vertical coordination, and there has not been a serious investigation into which skills are worthy of teaching and which are not. The goal of this initiative is to develop, then implement, standards for the use of computers and educational technology that will serve as a guideline for teachers in the delivery of instruction. Further, it is expected that this document will help shape the direction of instruction in classes, particularly at the secondary level, where relevant courses can be offered.

BACKGROUND:

The district has at various times in the past made an effort to develop a document of this sort, but has been largely unsuccessful in doing so. At this time there is no document in place, and teachers implement technology based on their own skill level and desire. Course offerings at the secondary level are not articulated so as to offer a comprehensive overview of a variety of computer and educational technology applications. The District Technology Leadership Team has seen the need to develop this document and has worked since October of the 2004 school year to develop this first draft.

PROCESS:

The Director of Technology shared his vision with the Technology Leadership Team in September of 2004, and a subcommittee of volunteers was formed shortly thereafter. This group agreed to use the International Society for Technology in Education (ISTE) National Educational Technology Standards for Students (NETS) as our guiding document. Using the NETS as a foundation, we developed a draft document over the course of six months, (attached). In addition, we reviewed similar documents from other districts, locally and nationally, in the process of devising a format that the committee felt would work best. We

agreed, as our first step, to produce a general K-12 document which provides an overview of the entire district.

STATUS:

The K-12 Objectives have been completed. As the NETS-S standards were revised in 2008, the district subsequently revised its Technology Objectives to match. Copies were distributed to all K-12, resource and special education teachers. Implementation has been phased in gradually beginning in 2010.

Rationale:

The purpose of this document is to outline standards for hardware acquisition for the Hendrick Hudson School district. As noted in the Strategic Instructional Technology Plan, standards will allow the district to maximize efficiency and make the most of limited resources. The goal is to provide a stable and efficient infrastructure, while balancing the needs of staff to use a variety of hardware and software solutions. These standards are designed to be applied primarily to the instructional setting, except where noted. In addition, we understand that assistive technology presents unique and specific requirements, which may override these standards. It is understood that the office setting presents different requirements which may not be well suited to these standards. These standards will be reviewed annually and updated as needed.

Donations:

Except in rare cases, the district will not accept donations of used computer equipment. An example of such an exception might be a lab requiring hardware to disassemble, or computers to experiment on. The high cost of integrating off brand and non-standard equipment into the district's infrastructure outweighs the benefit of its use.

Computer:

This specification will be updated *annually*. Whenever possible, the district will purchase computers in bulk at two points during the year (early summer and late winter as an option. In doing so we will limit the number of hardware platforms that we need to maintain an image for. This will allow fewer staff to support a greater number of machines.

- Dell Optiplex 3020
- 4 GB DDR RAM
- 250 GB SATA HD
- Windows 7 SP1 64 vit version
- USB 2 button scroll optical mouse

- Enhanced USB keyboard w/hotkeys

- Integrated sound and video

- 48X DVD/CD-RW

- Gigabit NIC

- 21" wide flat panel LCD

- Sound bar

- 3 yr warranty

Scanner:

The district has standardized on the HP brand for all scanners .

- General Use: HP Scanjet G3110

- High Resolution: HP Scanjet 8200

Digital camera:

Not defined at this time.

Printer:

The district has standardized on the HP brand for all printers.

- Medium Volume: HP 2550n

- High Volume Use: HP 4250n

- Color Low Volume: HP 2025n

- Color High Volume: HP 4650n

All network printers will be configured to use IP printing, thus increasing efficiency and simplifying management.

Smart Phone:

Office: Android OS devices integrated with Google Apps

Classroom: Smart Phones are not supported in the classroom setting

Projectors:

Projectors will be ceiling mounted or permanently installed on a cart whenever possible.

- NEC XGA 2500+ lumen
- To be purchased and installed in bulk three times per year

Digital White Board:

White Boards will be wall mounted whenever possible.

- Smart Technologies SB-680 with integrated speakers
- Deployment of fixed SmartBoards at all levels will take place as per the Principal's recommendations in consultation with the Executive DirectorTo be purchased and installed in bulk three times per year

Wireless:

- Cisco Meraki MR34 wireless controllers and access points are supported.

Laptops:

- Dell Latitude 6410

Current Plan				
Building	Upgrade Date	Age of Computers at Upgrade	Age of OS at Upgrade	Age of Office Suite at Upgrade
BV, FGL, FW	Summer 2007	8	6	
BMMS	Summer 2008	5	7	
HHHS	Summer 2009	5	8	
UPGRADE OFFICE	Summer 2010		9	7
WINDOWS 7 AND FW	Summer 2011	4	10	
BV	Summer 2012	5		
FGL	Summer 2013	6		
BMMS	Summer 2014	6		
HHHS	Summer 2015	6		

APPENDIX H   CURRENT WAN DIAGRAM

APPENDIX I   COMPUTER LEASE BUDGET PROJECTIONS
(ESTIMATED FIGURES)

#	Budget Cycle	School	Notes	Quantity	Purchase Amount	Annual Payment
1	2007-2008	ELEMENTARY	3 schools	450	$435,000	$115,000

2	2008-2009	BMMS	All	245	$185,000	$50,000
3	2009-2010	HHHS	All	217	$185,000	$50,000
4	2010-2011	OFFICE 2010	All district	1,000	$115,000	$40,000
5	2011-2012	FW	All	155	$115,000	$40,000
6	2012-2013	BV	All	165	$175,000	$55,000
7	2013-2014	FGL	All	185	$130,000	$45,000
8	2014-2015	BMMS	All			
9	2015-2016	HHHS	All			
10	2016-2017	Windows Upgrade and FWS	All district			

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